

# Alameda County Congestion Management Agency

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#### Memorandum

June 08, 2009 Agenda Item 4.2

**Date:** May 27, 2009

To: Plans and Programs Committee

From: John Hemiup, Senior Transportation Engineer

Subject: East Bay SMART Corridors Program - Operations and Management

(O&M) Funding Plan and Activities

### **Action Requested**

It is recommended that the Board adopt a conceptual two-year funding/cost-sharing plan for the Operations and Management of the SMART Corridors program to sustain the system operation until June 30, 2011.

#### Discussion

The East Bay SMART Corridors program is a cooperative effort by the Alameda County Congestion Management Agency (CMA) and 27 other partner agencies to operate and manage a multi-modal advanced transportation management system along five Corridors. They are: 1) I-80 and I-880 Corridors, 2) the Grand MacArthur Corridor, 3) the I-580 Corridor, 4) the International Blvd/Telegraph Avenue SMART Corridor, and 5) the Tri-Valley SMART Corridor.

The CMA in association with West Contra Costa Technical Advisory Committee (WCCTAC) and AC Transit, have funded the O&M of the SMART Corridors Program for the last eight years. The current funding plan includes funding from the CMA TIP, WCCTAC, AC Transit, Tri-Valley Transportation Council as well as federal CMAQ funds.

## Proposed Expenditure and Funding Plan-FY 2009/10 and FY 2010/11

A shortfall in the current (08/09) O&M funding was addressed by the Board at its March 2009 meeting. This action programmed \$250, 000 of CMA TIP funds. A conceptual two-year funding plan for fiscal years 09/10 and 10/11 is being presented for the Board's approval. Table 1 provides a summary of the annual estimated costs by corridor for the O&M of the SMART Corridors program for each of the next two years (FY 2009/10 and FY 2010/11). These anticipated costs are based on actual expenditures and the addition of two additional corridors: I-580 and Grand MacArthur.

The costs and funding requirements are shown in Table 2 by agency based on infrastructure density and roadway mileage. Table 2 also provides a summary of these proposed expenditures by agency for the next two fiscal years.

The Plan presented in Table 2 is meant to be a starting point for discussion among the agencies involved in the SMART Corridors. As the managing entity of the SMART Corridor O&M, the CMA continues to pursue legislation for a long term option for O&M funding, such as the Hancock bill (SB 205) which would provide vehicle registration fee revenues as a possible source of long term funding for O&M. It should be noted that the SMART Corridors O&M may need to be terminated unless a plan for funding the next two years of O&M can be secured with in the next two to three months.

Current funding of the O&M Plan relies on the participation of all O&M partners. If additional funds are not realized in this proposed two year plan, CMA may need to revert O&M to local agencies that are the owners of the SMART Corridor's infrastructure, or terminate the project.

Table 1 - Summary of Anticipated Annual O&M Expenses by Corridor

## FY 2009/10

| Cost Category  (Operations or  Management) (O/M) |                                      | I-80 & I-880 SMART Corridors | International-<br>Telegraph<br>SMART<br>Corridor | Tri-<br>Valley<br>SMART<br>Corridor | I-580<br>Corridor | Grand<br>MacArthur<br>Corridor | TOTAL       |
|--|--------------------------------------|------------------------------|--|-------------------------------------|-------------------|--------------------------------|-------------|
|  | Wireless                             | \$62,200                     | \$17,400   | \$11,000                            | \$1,925           | \$8,700                        | \$101,225   |
| 1.<br>Communications                             | Wireline<br>&<br>Managed<br>Services | 236,800                      | 78,000   | 50,000                              | 1,600             | 39,000                         | 405,400     |
| 2. Field Utilities <sup>(O)</sup>                |                                      | 13,800                       | 4,300  | Local<br>Agency                     | Local<br>Agency   | 2,150                          | 20,250      |
| 3. Centralized ATMS<br>Software (M)              |                                      | 50,000                       | 25,000   | 25,000                              | 25,000            | 12,500                         | 137,500     |
| 4. Agency ATMS System                            |                                      | 46,200                       | 12,000   | 12,000                              | 12,000            | 6,000                          | 88,200      |
| 5. ATMS Field Equipment                          |                                      | 105,000                      | 96,000   | 29,500                              | Local<br>Agency   | 48,000                         | 278,500     |
| TOTAL (O&M)                                      |                                      | \$514,000                    | \$232,700  | \$127,500                           | \$40,525          | \$116,350                      | \$1,031,075 |

## System Components

The East Bay SMART Corridors includes Advanced Transportation Management Systems (ATMS) field components which rely upon centralized software and hardware. The following are the principal components involved in operating and managing the SMART Corridors program:

1. <u>Communication System</u> – Communication lines between the centralized system and field components are leased from AT&T (formerly SBC) for wire-line connections and AT&T (formerly Cingular) for wireless communication. AT&T is responsible for maintenance and troubleshooting of the communications network.

- 2. <u>Field Utilities</u> The closed circuit TV (CCTV) and video streaming equipment use dedicated electrical power as the system does not rely on the power from local jurisdiction. Field utilities are provided by PG&E.
- 3. <u>Centralized ATMS Software and Management Services</u> The centralized software requires routine maintenance and upgrades. These services are currently being provided by AT&T DataComm.
- 4. <u>Agency ATMS System</u> Each participating agency is provided an ATMS workstation that provides real-time information about traffic conditions and statistics along the project corridors. The workstations are housed at each respective agency and are maintained by consultants to ACCMA. They also maintain CCTV video processing components.
- 5. <u>ATMS Field Equipment</u> The field elements of the Advanced Transportation Management System of the project are comprised of Closed Circuit TV, non-intrusive vehicle detection system, and emergency preemption and transit signal priority elements. Currently, a consultant to ACCMA is providing these services.
- 6. <u>Signal Control System</u> Signal control system, including traffic signal controllers, signal operation, signal appurtenances and video/inductive loop detection system is owned and maintained by each operation agency. ACCMA has no responsibility for this component of the system.

Table 2 - Summary of Proposed Funding by Agency (FY 2009/10 and FY 2010/11)

| (F1 2009/10 and F1 2010/11)              |                       |                       |                            |  |  |  |  |  |  |
|--|-----------------------|-----------------------|----------------------------|--|--|--|--|--|--|
| FY 2009/10 and FY 2010/11 ( 2 Year Plan) |                       |                       |                            |  |  |  |  |  |  |
| Funding Source                           | FY 2009/10<br>Funding | FY 2010/11<br>Funding | Total Requested<br>Funding |  |  |  |  |  |  |
| AC Transit                               | \$330,000             | \$ 330,000            | \$660,000                  |  |  |  |  |  |  |
| ACCMA                                    |                       |                       |                            |  |  |  |  |  |  |
| (CMAQ)                                   | \$ 400,500            | -                     | \$ 400,500                 |  |  |  |  |  |  |
| New Federal Funds                        | -                     | \$400,500             | \$ 400,500                 |  |  |  |  |  |  |
| CCTA/WCCTAC                              | \$87,380              | \$ 87,380             | \$174,760                  |  |  |  |  |  |  |
| Tri-Valley                               | \$127,500             | \$127,500             | \$255,000                  |  |  |  |  |  |  |
| TBD                                      | \$85,695              | \$ 85,695             | \$171,390                  |  |  |  |  |  |  |
| Total                                    | \$1,031,075           | \$ 1,031,075          | \$ 2,062,150               |  |  |  |  |  |  |

Notes: Percentages below are based on each agency percentage of equipment along project corridors:

- AC Transit contribution is 41% for San Pablo and I-880 Corridors and 50% along International/Telegraph Corridor;
- CMA contribution is 41% along San Pablo and I-880 Corridors; 50% along International/Telegraph Corridor;
- CCTA/WCCTAC contribution is 18% for I-80 Corridor/I-880 Corridor (Applies to the I-80 Corridor portion only).
- Alameda County's commitment to the Tri-Valley is currently for 18 months for end of 2009. A new funding plan will be required at the end of the 18-month period.

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